Message

From: Ross, Steve@DTSC [Steve.Ross@dtsc.ca.gov]

Sent: 12/24/2015 8:31:06 PM

To: Santiago-Ocasio, Carmen [Santiago-Ocasio.Carmen@epa.gov]

CC: MacDonald, Alex@Waterboards [Alex.MacDonald@waterboards.ca.gov]; Bradfish, Larry [Bradfish.Larry@epa.gov];

Shaffer, Caleb [Shaffer.Caleb@epa.gov]; Keller, Lynn [Keller.Lynn@epa.gov]; Kwei, Orchid@DTSC

[Orchid.Kwei@dtsc.ca.gov]; Jacobsen, Nathan@Waterboards [Nathan.Jacobsen@waterboards.ca.gov]

Subject: RE: Draft LUCs for C29

Attachments: PGOU-01 Deletion-080615.pdf; Draft Request for Partial Deletion - PGOUop.pdf; Comparison of C41 and C29

LUC 219747 1- 219908 1.docx; Potential indoor Air Risk.pdf; Aerojet C41 LUC - Final - October 2015 (7).pdf

Hi Julie,

The attached revised figure was sent on 10/26/2015 to agency project managers to facilitate the partial deletion review and discussion from the document sent on 3/26/2015. In the figure, you can see all the areas requiring recorded environmental restrictions and Table 1 provides the listing of the 19 areas with the supporting reference to the PGOU ROD decision document.

As you can see, the soil areas in PGOU fall into 3 types of environmental restrictions. One type is for soil remediation that has been completed. So what remains is subject to groundwater use restrictions and maybe soil management plan requirements. As you know, C41 was the example that has been worked on by all of us. According the PGOU ROD, 10D, 11D, and C4 also fall in this category as well. Similar to discussions with C41, all will have to assess if there are vapor mitigation restrictions necessary for 10D, 11D, and C4 due to current risk standards (e.g. TCE) or if unrestricted use is still the case (e.g. changes in lead standard). There are exhibits for 10D, 11D, and C4 that can serve as the property survey, written legal descriptions, and/or remediation systems requiring protection at the end of the draft request for partial site deletion for PGOU in Attachment A.

For the second type, they are no action areas. C29 environmental restriction is in house with the groundwater use restrictions. Both the WB and DTSC program staff have established no environmental issue using the current risk standards. According the PGOU ROD, 4D, 5D, 36D, 37D, 39D, C10, C14, C15, C29, C32, D(e), and GET D fall in this category. Similar to above, all will have to assess if there are vapor mitigation restrictions necessary due to current risk standards or if unrestricted use is still the case (e.g. changes in lead standard).

For the third type, they require vapor mitigation standards. There is no acceptable environmental restriction document on this type to date. In the August 6, 2015 meeting, Aerojet outside counsel was told to review the BOU ROD for assistance in drafting the conditions since all the agencies were thoroughly involved in discussing this component during the ROD. FCS, 7D, and 33D fall into this category according to the PGOU ROD.

For Carve-out, Alex has suggested we all stop at C29 and let Aerojet know that they have to assess the properties that may be potentially impacted due to changes in the TCE standards. A draft figure was prepared to indicate the potential added areas of Carve-out (in red) that may fall in this category. As you know, this area is not a part of PGOU and Aerojet has already expressed that this area should go on a separate track. I have attached Alex's figure (see Alex email of 12/15/2015) but have not had a chance to compile and compare it with the Record of Survey Plats that support the 3 environmental restrictions from the early 2000s to see which added areas they would be. For Area 40, I know we have expressed to Aerojet the need to identify the 5 ug/L TCE contour and then the 100 foot buffer for any residential planning efforts for addressing any indoor air pathway issues. Alternative, Alex and I talked about whether to ask Aerojet, as the property owner, just file an

environmental restriction similar to the authorities used for the ones done in the 2000s for use of vapor mitigation systems on the red carve-out properties.

Lastly, I have attached the C41 LUC received from Ms. Murch on November 2, 2015. This LUC is the version that would be circulated for notary signatures. Aerojet would start first if all agree.

Hope this helps in the programmatic and legal issues. Thanks.

Steve.

From: Santiago-Ocasio, Carmen [mailto:Santiago-Ocasio.Carmen@epa.gov]

Sent: Thursday, December 17, 2015 3:41 PM

To: Ross, Steve@DTSC

Cc: MacDonald, Alex@Waterboards; Bradfish, Larry; Shaffer, Caleb; Keller, Lynn

Subject: RE: Draft LUCs for C29

Steve and Alex:

We can have the call on December 29th at 10:00 am. Larry is requesting for DTSC attorneys to be in the call as well. Today he received a request from Larry Hobel asking if EPA could send Aerojet a letter confirming the new no action covenants for C29 and C41 are acceptable to EPA. We want to understand all the programmatic and legal issues before we reply.

Alex: I understand you sent a letter to Aerojet requesting they perform an evaluation for the carved-out lands. Can you send us a copy of the letter? I don't know if you received a reply from Aerojet. If they replied, could you send us their response as well?

Thanks,

Julie Santiago-Ocasio

Julie Santiago-Ocasio, RPM US EPA Region 9 (SFD 7-1) California Site Cleanup Section I Superfund Division 75 Hawthorne Street San Francisco, CA 94105 (415) 972-3525

From: Ross, Steve@DTSC [mailto:Steve.Ross@dtsc.ca.gov]

Sent: Thursday, December 17, 2015 2:43 PM

To: Santiago-Ocasio, Carmen < Santiago-Ocasio. Carmen@epa.gov>

Cc: MacDonald, Alex@Waterboards < Alex.MacDonald@waterboards.ca.gov >

Subject: FW: Draft LUCs for C29

Hi Julie,

Alex is not available from 11-1 tomorrow or before 10am on 12/29. All other times those two days are okay. Let us know. Thanks.

Steve

From: MacDonald, Alex@Waterboards Sent: Tuesday, December 15, 2015 3:56 PM

To: Ross, Steve@DTSC; Kwei, Orchid@DTSC; Jacobsen, Nathan@Waterboards; Selzer, Brooke@DTSC

Subject: RE: Draft LUCs for C29

Today I took a look at the groundwater VOC data, groundwater elevation data, carve-out areas and areas with existing LUCs for indoor vapor intrusion on those carve-out areas. Attached is a figure that shows:

1. Hatched area is the carve-out lands.

- 2. Yellow shaded areas are those carve-out areas that have LUCs based on potential indoor air issues from release of VOCs from groundwater to the vadose zone. These were adopted during the carve-out and PCD modification process. They were developed based on the TCE risk values at the time.
- 3. Red shaded areas those areas carve-out areas that I believe should be re-evaluated for LUCs for potential indoor air risk (VOCs from the groundwater). This is based on the 5 μ g/L in groundwater line that Aerojet and the agencies have agreed to use as the demarcation line for potential indoor air risk from shallow groundwater with TCE (see Area 40). The areas in red have shallow groundwater (the deepest is around 80 feet, and either are over groundwater that has TCE at 5 μ g/L or greater or downgradient from a plume that has significant concentrations (generally greater than 100 μ g/L) The downgradient definition has some tweaks the southwest red shaded area is not exactly downgradient, but a slight shift in groundwater flow could produce a more westerly component. The southeastern red shaded area is expanding the area of concern to the just past the 5 μ g/L TCE line. (I believe the previous criteria was around 30 μ g/L).

The boundaries of the shaded areas are not precise and I am only looking at additional evaluation at this time to ascertain whether are not LUCs are appropriate.

Alex

From: Ross, Steve@DTSC

Sent: Friday, December 11, 2015 10:56 AM

To: MacDonald, Alex@Waterboards; Kwei, Orchid@DTSC; Jacobsen, Nathan@Waterboards; Selzer, Brooke@DTSC

Subject: RE: Draft LUCs for C29

All,

I have checked with HERO regarding C29. In her November 20 response to me, Valerie concurs that the concentrations of chemicals as presented in soil and soil vapor are less than their respective risk based screening levels for human health. In his November 16 response to me, Ed indicated the concentrations of detections are inconsequential for ecological receptors. His e-mail is quite detailed and goes as follows:

"The Area C29 data contained in the e-mail copy you provided are from a limited sampling effort (1 soil sample, 2 soil vapor samples) from sixteen years ago. In comparison to present-day screening levels for ecological receptors, or to Aerojet's background threshold values (BTVs), the analytical results are essentially non-starters.

For five of the VOCs in soil vapor, the reported concentrations are less than current screening levels. There are no eco screening values for ethanol (detected at 130 ug/m^3, and with a human-health screening number in the millions of ug/m^3), and the detected concentration of toluene (500 ug/m^3) is only a bit above the upper-bound eco screening level of 420 ug/m^3. At sixteen-years old, the detected concentrations of VOCs can't be considered representative of current conditions, but relative to current screening concentrations, they are inconsequential for ecological receptors.

Detected concentrations of the inorganic constituents in soil are all at or below the ecological screening levels or the BTVs. It appears that the e-mail listed the wrong soil-type data for Area C29 and used an older test-statistic for the BTV, but that doesn't change any conclusions: detected values were lower than BTVs or screening values. The non-detect results (Sb, B, Cd, Hg, Se, Ag, and Tl) hover near the screening values and BTVs, but because the NDs are "less than" values, it can't be definitively stated that the NDs are below screening levels or BTVs. Here too, the NDs are close-enough to background and screening values as to be inconsequential for ecological receptors."

Regarding the C29 LUC, I have an Envirostor work services request submitted on 11/10/2015 that has not been assigned with an end date that has passed. So essentially, I need to gain perspective with when DTSC legal can begin work on the C29 LUC. With the risk analysis complete using current measures, C29 LUC should go smoothly.

Alex, do you know which carve-out lands to focus on in the gathering of soil gas data (Layer A TCE contamination?) The contaminated groundwater is located deeper as you go westerly, so a substantial amount of carve-out lands would not likely be a threat to indoor air. In its transmittal letter of the Central Disposal Area (CDA) Vapor Intrusion Evaluation dated July 15, 2008, Aerojet agreed to conduct an updated evaluation every two years until completion of the Central OU RIFS to verify the assumption that anticipated TCE concentrations in the groundwater immediately downgradient from the CDA would not increase. I don't know if the Agencies agreed on this proposal or if Aerojet has done this for soil gas sampling recently.

Have to think about this in general for a bit. There are 3 LUCs in the early 2000s not signed by DTSC with different legal property descriptions, elements that would be considered under local land use jurisdictions, and references to old recorded survey plats. So it will be a challenge to figure it all out. Thanks.

Steve.

From: MacDonald, Alex@Waterboards **Sent:** Friday, December 11, 2015 8:56 AM

To: Kwei, Orchid@DTSC; Jacobsen, Nathan@Waterboards; Ross, Steve@DTSC

Subject: Draft LUCs for C29

I did not find anything of concern in the subject draft LUCs for IC29 supplied by Aerojet Rocketdyne. There is one issue that I have brought to Aerojet and I think a path to resolution should be established prior to approving additional LUCs. That issue deals with property that has already been carved out (2002 PCD modification). There are areas with unrestricted use (except for the standard groundwater LUCs) that, now with the lowering of the risk value for TCE, are overlying groundwater with concentrations of TCE that could pose an adverse threat to indoor air. LUCs need to be placed on those properties and it is best to do that when the property is still in Aerojet Rocketydne's possession. I know Aerojet Rocketdyne is working on this, but you never know when property may be transferred as they are not required to provide notice on these already released properties.

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